



THE UNIVERSITY *of* EDINBURGH

## Edinburgh Research Explorer

### Networking practices and networking cultures

**Citation for published version:**

Spigel, B 2016, Networking practices and networking cultures. in EA Mack & H Qian (eds), *Geographies of Entrepreneurship*. Routledge Studies in Human Geography, Routledge.

**Link:**

[Link to publication record in Edinburgh Research Explorer](#)

**Document Version:**

Peer reviewed version

**Published In:**

Geographies of Entrepreneurship

**General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

**Take down policy**

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact [openaccess@ed.ac.uk](mailto:openaccess@ed.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.



# Networking Practices and Networking Cultures

Ben Spigel, University of Edinburgh Business School

Published in *Geographies of Entrepreneurship* Elizabeth A. Mack, Haifeng Qian (eds)

*Scholars and practitioners have long acknowledged the role of networks and networking in the entrepreneurship process. Entrepreneurs depend on their social networks to gather the knowledge and resources necessary to start and grow a new firm and empirical evidence suggests that entrepreneurs with larger and more diverse networks are more likely to survive and prosper. However, researchers have typically seen networking by entrepreneurs as an instrumental practice designed to help their firm rather than as a social activity embedded in regional and industrial cultural structures. This chapter employs a Bourdieuan framework to study the networking practices of entrepreneurs in two Canadian cities in order to draw out the cultural embeddedness of networking practices.*

## 1. Introduction

The size and structure of entrepreneurs' social networks are key predictors of survival and success. Entrepreneurs with larger social networks with diverse arrays of contacts tend to have better access to the financial and knowledge resources they need to discover and exploit opportunities in the marketplace (Arenius & de Clercq, 2005). There is significant evidence that the size and quality of entrepreneurial networks differs between regions and nations, which is both a cause and consequence of the continued clustering of entrepreneurial activity (Rutten, Westlund, & Boekema, 2010). The heterogeneous geography of entrepreneurial networks has far reaching consequences for regional economic development and innovation: regions where entrepreneurs have smaller or less resource-rich networks will also tend to have lower rates of firm formation and growth.

But despite the voluminous research on entrepreneurial networks there are two significant research gaps. First, networking is frequently viewed as an instrumental activity entrepreneurs engage in to support their firms: entrepreneurs are expected to access their social capital in the same way they might access their financial capital in a bank. This ignores the fact that *social* networks are deeply *social* things, intertwined in personal life. Secondly, with exceptions such as Klyver and Foley (2012) and Lang et al. (2014), there is little discussion about the relationship between regional cultural and economic structures with the networking practices entrepreneurs employ. As a result, while there is substantial evidence of variation in networking patterns between regions, we know comparatively little about the processes linking cultural outlooks and networking practices.

This chapter addresses these issues through an investigation of the networking practices of technology entrepreneurs in two Canadian cities: Waterloo, Ontario and Calgary, Alberta. The chapter argues that studying entrepreneurs' use of networks and social capital requires us to understand entrepreneurs' attitudes towards the act of entrepreneurship itself. These attitudes are constructed within larger cultural milieux about the purpose and role of entrepreneurship. The chapter employs a Bourdieuan perspective in which these practices are the outcomes of entrepreneurs' individual habitus and the unwritten 'rules' of a local field. The next section discusses previous research on the role of networks within the entrepreneurship process and previous thought about how regional and national cultures influence how entrepreneurs network. This is followed by a discussion of Bourdieu's sociology of practice in the context of the entrepreneurship process. Section 3 introduces the

two case studies and the qualitative methodologies used to study networking within them. This is followed by a comparison of networking practices between technology entrepreneurs in Calgary and Waterloo in sections 4 and 5. Section 6 concludes by arguing that for a more nuanced perspective of entrepreneurial networks.

## **2. The Geography of Entrepreneurial Networks**

### *2.1. The Role of Networks in Venture Creation and Survival*

Entrepreneurship is a relational and social process (Dodd & Anderson, 2007). Knowledge about new opportunities, technologies, or changes in the marketplace gained through trusted social contacts is the foundation of entrepreneurial innovation (Stuart & Sorenson, 2003). Entrepreneurs with larger and more diverse networks have been shown to have superior access to financing (Shane & Cable, 2002), novel ideas (Powell, White, Koput, & Owen-Smith, 2005), and are better able to capitalize on opportunities in the marketplace (Alistair R Anderson & Miller, 2003). There is little doubt that the size and structure of entrepreneurs networks significantly influence every stage of the entrepreneurship process. Since the introduction of Aldrich and Zimmer's (1986) 'network success hypothesis,' there has been a sustained research interest in how entrepreneurs employ their social networks (see (Hoang & Antoncic, 2003). The structure and content of an entrepreneur's network affect both their original intentions to start a firm and their ability to identify potential opportunities (Burt, 2004). As startups grow, entrepreneurs draw on knowledge from their networks to find new clients and resources (Lechner & Dowling, 2003). Later in their growth processes, entrepreneurs employ their social networks to find investment from angel investors and venture capitalists (Sorenson & Stuart, 2001).

The structure of a network ultimately determines its usefulness to entrepreneurs. Networks with a diverse array of actors in them will contain more unique sources of useful information to help the entrepreneur identify new opportunities (Alistair R. Anderson & Jack, 2002). Entrepreneurs must balance the need for a small number of very strong ties that are based on long-term trust which can provide substantial resources such as investments with a larger number of weaker ties with unique resources at their disposal (Granovetter, 1973; Jack, 2005). But there is little evidence for an optimal structure of entrepreneurial networks. While Brüderl and Preisendöfer (1998) find that higher proportions of strong ties help firm survival due to the increased support and resources entrepreneurs can draw from them, Uzzi (1996) argues that a surfeit of strong ties leads to over-embeddedness, where entrepreneurs are prevented from taking the most economically rational actions, such as finding a new supplier, due to their long standing ties of trust.

Networking practices vary across time and place, with particular networking practices becoming part of regional or organizational routines. This includes factors such as the proclivity of workers to meet up and share knowledge over drinks, freely share advice and contacts, or to protect propriety knowledge by avoiding contact with outside groups (Henry & Pinch, 2001; James, 2005). These locally specific networking practices evolve over time in response to both regional cultural outlooks towards networking and the organizational practices of dominant companies in the area. Saxenian (1994) highlights how the open organizational cultures of Silicon Valley firms like Hewlet Packard led to a networking culture there as opposed to how Boston's closed corporate culture discouraged networking and knowledge sharing amongst technology firms.

Within the entrepreneurship literature networking is frequently treated as an instrumental act rather than as a part of the entrepreneur's social life. A very large stream of the entrepreneurial networking literature ignores the heterogeneity of networking practices and instead adopts a universalist model of entrepreneurial social capital (Klyver, Hindle, & Meyer, 2008). From this perspective, networking is a strategic activity entrepreneurs engage in to increase the amount of resources they can draw upon in their networks. This is not to say that networking is unimportant in the entrepreneurship process: Neff et al. (2005) demonstrate the overriding importance of network building in technology entrepreneurship. Rather, there is a tendency to view networking as a purely purposeful strategy rather than as intrinsically social activity. Networks are simplified into their structural characteristics such as size and diversity, eliminating subtle differences in networking practices and content.

### 2.3 Bourdieuan Perspectives on Entrepreneurial Networking

A Bourdieuan perspective is a useful way to frame the interactions between regional culture and networking practices while maintaining a socially situated view of networking itself. A Bourdieuan analysis view entrepreneurs' practices — the day-to-day actions they carry out in pursuit of their goals — as the emergent objective rules and power hierarchies of a social system (*field*) as well as how these rules are understood, interpreted, and internalized by the individual within their *habitus* (Bourdieu, 1977; Bourdieu & Wacquant, 1992; Swartz, 1997). The explicit focus on the interplay between individual outlooks and structural forces helps resolve the tension between deterministic structuralism and contextless methodological individualism. In a Bourdieuan perspective on entrepreneurship, fields represent the beliefs and outlooks regarding the social and economic role of entrepreneurship (Karataş-Özkan, 2011; Spigel, 2013). These can be understood as the 'rules of the game' of entrepreneurship (Stringfellow, Shaw, & Maclean, 2014). This includes attributes like the social status accorded to entrepreneurs (which differs based on their industry and perceived 'innovativeness'), the acceptability of the risk and extra work entrepreneurs take on, and the importance of entrepreneurship as a personal vocation instead of a way to make money. Fields also determine the value of different kinds of capital such as economic capital (money or profits), social capital (social connections and resources) or cultural capital (the social status of building a successful business). As Bourdieu (1986) argues, while the overriding goal of modern capitalism might be the accumulation of economic capital other types of capital may be more or less important in particular fields. Actors structure their practices around acquiring the types of capital they believe are most valuable.

However, fields are not the cause of entrepreneurial practices. Actors understand the rules of the field through their habitus, their internalized dispositions towards entrepreneurial actions (Bourdieu, 1990, 2005). The habitus is developed through an individual's experiences within fields, particularly through their education. This means that the seemingly objective rules of a field are interpreted differently by actors based on their habitus, allowing them to develop new types of practices. These practices are not rote responses to a standard field of expectations but rather a form of improvisation and experimentation based on individual goals, skills, and situations. Practices therefore emerge out of the combination of the rules of a field and the diverse ways in which actors interpret those rules through their habitus and form their own goals based on what forms of capital they think are most valuable to them. There is no one singular 'entrepreneurial habitus.' Entrepreneurs develop unique outlooks and orientations towards the rules and structures of the local field through their previous educational and work experience which in turn enables or discourages certain types of practices.

We can speak of two major fields that influence the technology entrepreneurship process: the field of technology entrepreneurship (FTE) and the local field. The FTE refers to the norms, expectations, and understandings about starting and running a high-tech firm. This includes both the expectation to take on substantial personal risk and to work far beyond the normal 40-hour work week but also social expectations of what an entrepreneur should look and act like (Centner, 2008). For instance, technology entrepreneurs must adopt specific forms of dress and presentation (e.g. not wearing a suit on a daily basis) but at the same time are often expected to violate the 'rules' of the field in order to demonstrate their innovativeness and independence (de Clercq & Voronov, 2009a, 2009b). Meeting these expectations help entrepreneurs build the symbolic capital necessary to be seen as legitimate entrepreneurs (de Clercq & Voronov, 2009c).

The local field represents the informal social rules regarding entrepreneurship that have developed within the region. Local fields develop over time based on the region's economic and social history, the influence of prominent local 'success stories' or dominant employers, and the influence of outside forces such as national policies and global capitalism (Fligstein & McAdam, 2012). The local field is of particular importance because entrepreneurial actors are continually embedded in it, making its influence hard to ignore (Spigel, 2013). Entrepreneurs depend on resources contained within the local field and therefore must meet the expectations of entrepreneurship within the field — if they do not it will be difficult to be taken as a legitimate economic actor deserving of resources. But beyond strategically hewing to the rules of the local field, entrepreneurs internalize these rules on a non-conscious level, normalizing particular actions or outlooks to the point where they become part of actor's unspoken repository of practices. In this sense, the local field represents the dominant norms, rules, and outlooks of the regional culture.

Entrepreneurs operate within the context of both the FTE and their local field and must develop practices that balance the often conflicting demands of these two fields if they are to be viewed as legitimate entrepreneurs. This contributes to the formation of distinct patterns of regional entrepreneurial practices and identifies, such as the ways in which technology entrepreneurs in Montana balanced the 'Silicon Valley' entrepreneurial outlooks of their industry against their risk averse cultural orientation of their rural community (Gill & Larson, 2014) or how entrepreneurs in Salt Lake City sought compromises between the expectations of the FTE for long work hours with the preference of the local Mormon community to spend that time with family and friends (James, 2005). Entrepreneurs strike these balances based on their own internalized views of what practices make sense given their field-based contexts. Differences in entrepreneurial practices and processes between regions are therefore not due to the deterministic force of social structures but are rather the outcome of individual actors choosing what practices they think makes sense given their habitus-informed understanding of the rules of the fields they operate in along with their goals and visions for the future.

From this perspective, entrepreneurial networking is not simply an economic activity. Networking — the act of purposefully connecting with others to gain resources, information, and support — is part of an entrepreneur's larger social life. The extent to which entrepreneurs choose to dedicate time and energy towards networking (such as by attending networking events, meeting colleagues after work, or helping to organize entrepreneurial events) as opposed to developing the business or spending time with their family depends on how the social and symbolic capital produced by networking is valued against other forms of capital. Entrepreneurs' networks provide two main types of benefits: the actual resources

entrepreneurs can gather from them (social capital) and the legitimacy of being associated with other dynamic, growth-oriented entrepreneurs (symbolic capital). While this symbolic capital is prized within the FTE and is an important way of attracting investment, it may be less important in some local fields.

### 3. Entrepreneurial Networking in Calgary and Waterloo, Canada

#### 3.1 Case Study Selection and Methods

Two case studies of technology entrepreneurs in Calgary and Waterloo, Canada are used to explore the socially situated nature of entrepreneurial networking within local fields. While both cities are centres of Canadian technology entrepreneurship and innovation, entrepreneurs exhibited very different networking practices. These differences appear related to the structure of the cities' local fields and how the rules and norms of the FTE are interpreted through them. As shown in Table 1, both regions have high rates of high-tech entrepreneurship, highly educated labour forces and active entrepreneurial investment environments.

[table 1 here]

Semistructured interviews were conducted with technology entrepreneurs between 2010 and 2011. A pool of entrepreneurs in six high-tech sectors who founded companies after 1990 was constructed using Scotts Corporate Directory, a Canadian business directory. Entrepreneurs were contacted at random from this list in order to avoid a bias towards more prominent startups. The response rates in Calgary and Waterloo were 27% and 35% respectively. Along with questions about firm history, the regional economic environment, and networking practices, firm founders were asked to identify which of six entrepreneurial resources they had drawn on while building their firm. These resources were: (1) an emergency loan of less than \$5,000; (2) an investment greater than \$10,000; (3) a loan provided at a reduced interest rate; (4) a referral to a skilled accountant or lawyer; (5) a referral to someone who could aid the entrepreneur with marketing or sales and (6) a referral to an employee they have hired. This provides a proxy for their overall levels of social capital. To triangulate findings within entrepreneurs additional interviews were conducted with selected economic development officials and investors to triangulate the findings from entrepreneur interviews (see Table 2).

[table 2 around here]

	Calgary	Waterloo	Total
<b>Entrepreneurs</b>	28	23	51
<b>Investors</b>	5	5	10
<b>Economic Development Officials</b>	6	4	10
<b>Total</b>	39	32	71

### 4. Networking for business development in Calgary

Calgary's entrepreneurial economy is propelled by a boom in the province's oil and gas sector. While the oil and natural gas have been extracted in Alberta since the early 20th century, the development of the Athabasca Oil Sands in northern Alberta have helped

Calgary develop into a command and control centre for Canada's energy industry (Chastko, 2004). The oil and natural gas industry dominates the regional economy, accounting for more than 20% of the region's overall GDP (Conference Board of Canada, 2012). The industry's size gives it considerable influence over Calgary's local field. The organizational structures and norms of foreign energy firms were imprinted in the region through the pervasive economic presence of US subsidiaries, which served as a major training ground for most of the industry's engineers, managers, and technicians. During the 1950s and 1960s, many executives of domestically owned oil firms in Calgary had spent time in large US-controlled firms like Imperial Oil (the largest oil firm in Canada) and absorbed these firms' organizational culture (Foster, 1979). This trend is still visible. Many interviewees initially moved to Calgary to take a job at one of the larger oil firms. They internalized the industry's unwritten rules working at these firms and carried the outlooks with them when founded their own startups. Much of the region's technology entrepreneurship is oriented towards serving this industry. In the words of a local angel investor: "a lot of technology [entrepreneurship] happens here. I think that 10 or 11% of the population is employed in the technology sector, but 99.5% of that is in technology for oil and gas." (C135) The region's other major technology cluster of wireless communications developed out of the pressing need of resilient communication links between oil wells in the north of Alberta (Lucas, Sands, & Wolfe, 2009).

The influence of the oil and gas industry has lead to the development of several significant elements within the local field that have affected the nature of entrepreneurial networking within it. The high value placed on acquiring economic capital and the lower value of the symbolic capital produced by successful entrepreneurship is the most important aspect of the local field. Interviews with entrepreneurs, investors and economic development officials suggest that actors are motivated by the goal of accumulating economic capital (the profits from an entrepreneurial endeavour or investment) rather than the symbolic capital (the social prestige) of starting and running an advanced technology company. As an early sociological study of Calgary's oil industry argued: "the spirit of competition [in Calgary] translates into the need to make a good living and achieve career success" (House, 1980, p. 80).

The focus on economic capital appears to have reduced the symbolic capital associated with entrepreneurship within the local field. While entrepreneurship has the potential to generate a great deal of economic capital, an entrepreneurial windfall takes years of preparation. During this time, entrepreneurs typically makes less money while working far harder and bearing far more risks than regular employees. In some fields, the symbolic capital and prestige of being an entrepreneur can compensate for the lower economic returns, but this does not appear to be the case in Calgary. The economic capital produced by entrepreneurship, rather than the act of entrepreneurship itself, is most valued within Calgary's local field. While there is a burgeoning technology entrepreneurship scene unrelated to the oil and gas industry, it is relatively small compared to this much larger market. This means that the field of technology entrepreneurship has less influence within the local field than the field of the oil and gas industry.

One outcome of this is the reduced importance of networking with other entrepreneurs to build symbolic capital or develop new skills. In situations where there is little symbolic reward for being an entrepreneur, there is little incentive to spend what little available time an entrepreneur has on spending time with other entrepreneurs. Calgaryan entrepreneurs had lower levels of social capital than their counterparts in Waterloo. Of the six

social resources entrepreneurs were asked about, Calgarian entrepreneurs utilized an average of 2.04 compared to 2.61 in Waterloo. Furthermore, a lower proportion of entrepreneurs in Calgary said they discussed entrepreneurship with their friends and family. Only 46% of entrepreneurs in Calgary reported this kind of conversations, compared with 70% in Waterloo. This indicates that entrepreneurs in Calgary are less likely to have discussed entrepreneurial challenges with others and that they gather fewer entrepreneurial resources from their social networks.

Despite their low rates of networking with other entrepreneurs there are several reasons to suggest that Calgarian entrepreneurs are otherwise very active networkers. The petroleum industry is largely project based and oil exploration and development requires the cooperation of many different firms. This means that firms must constantly be looking for new projects and contracts; knowledge of which is spread through social networks rather than formal requests for proposals according to interviewees. As one entrepreneur suggested: “oil and gas is an old-boys network. It’s a lot more the face-to-face handshaking than a ‘let’s pulverize you.’” (C129) Calgary is filled with constant buzz and knowledge exchange as firms seek out new partners, clients, and suppliers for temporary projects. Second, there appears to be a great deal of worker mobility. Employees frequently move between firms, bringing their networks of contacts with them. As one entrepreneur described: “we’ve got 27 people or so on staff and they’ve come from other firms that have contacts from other firms, and when they start working here they might call their contacts up and say I’m not longer at [old firm] and I’m over at [new firm] now and let’s go for lunch.” (C114)

Calgary is marked by high levels of networking between entrepreneurs and clients but relatively lower levels of networking between entrepreneurs themselves. Networking is understood as a way to create and sustain business relationships rather than a way to build entrepreneurial skills and solve technical and business problems. This is evidenced by entrepreneurs’ resistance to participating in public entrepreneurship training and networking programs. While Innovate Calgary (a publicly funded startup incubation facility) runs entrepreneurship training and networking programs, none of the entrepreneurs interviewed — even Innovate Calgary’s own tenants — reported participating in them. Nor did entrepreneurs attend other networking events hosted by the Chamber of Commerce or other local organizations because they did not believe attending these programs would lead to increased profits. As one entrepreneur explained: “there’s been quite a few different entrepreneurship groups, but what I have found is that most of them are there because they think they’re going to get a chance to meet potential clients. What it ends up being is a bunch of people like themselves.” (C104)

Networking practices in Calgary have developed within the context of the region’s local field with little influence from the outside FTE. The purpose of networking is to develop business relationships with local clients in order to produce economic capital rather than spending time socializing with other entrepreneurs in order to develop both their business skills and the symbolic capital of entrepreneurship. This normalizes some practices, such as intensive networking within the oil and gas industry, while delegitimizing other practices like participating in public-sponsored entrepreneurial networking programs. This indicates that the importance of economic capital within Calgary’s local field has displaced the symbolic capital of networking found within the field of technology entrepreneurship. Entrepreneurs both within and outside of the oil and gas sector placed little importance in status-building networking activities, preferring to spend that developing the business in other ways. Entrepreneurs’ choice of networking practices emerge from this interaction



between entrepreneur's habitus and their understanding of the unwritten rules and norms of their local field.

## **5. Purposeful Entrepreneurial Networking in Waterloo, Ontario**

The Waterloo Region, a municipality in Southwest Ontario made up of the cities of Waterloo, Kitchener, and Cambridge, is a centre of Canadian innovation and entrepreneurship. The region's economy is propelled by the presence of both the headquarters of major international technology firms such as Blackberry and OpenText as well as numerous smaller technology startups, many of which have received substantial venture investments and help constitute a successful entrepreneurial ecosystem (Spigel, 2015). There are two major reasons for the region's success as a hub of high tech entrepreneurship despite its relatively low population. First, the University of Waterloo (UW), one of the world's leading institutions for computer science and engineering research, plays an important role in attracting skilled students to the region who then enter the workforce as entrepreneurs or skilled employees. The influence of the University of Waterloo dates back to its founding in 1957 as a polytechnic college designed to train engineers and technicians for the region's industrial economy (Bramwell, Nelles, & Wolfe, 2008; Nelles, Bramwell, & Wolfe, 2005). Second, the region has developed a local field that normalizes entrepreneurial activities and produces high rates of symbolic capital for high-tech entrepreneurship. Both these factors are aided by the presence of highly effective local economic development agencies which help reproduce the field and encourage particular practices, such as intensive networking between entrepreneurs. UW's development as an entrepreneurial university developed in tandem with this local culture and the larger field of technology entrepreneurship. This local culture has been reinforced by the successes of newer technology firms and the continued involvement of these firms' founders in promoting entrepreneurship, mentoring new founders, and as donors and supporters of the region's economic development and entrepreneurship organizations.

Beyond local factors, the region has been influenced in recent years by the norms and rules of the FTE. As argued above, this field normalizes activities such as risk-taking and the importance of social capital between entrepreneurs. This field influences the region through media channels like entrepreneurial and technology magazines and webpages, the presence of satellite offices of major international technology firms as well as by local economic development organizations encouraging these outlooks. One organization in particular, Communitech, has been very active in organizing programs that promote these values in both new and experienced technology entrepreneurs. Communitech hosts networking events, round table discussions for newer entrepreneurs to meet their more experienced counterparts and runs incubator and accelerator facilities that provided subsidized office space and support for promising firms.

One of the most prominent outcomes of this overlapping field structure is the importance of networking between entrepreneurs in Waterloo. Interviewees in Waterloo drew upon an average of 2.61 out of 6 resources from their social network, compared to an average of 2.04 in Calgary. When lifestyle entrepreneurs — those with few plans for future growth or innovation — are excluded from the sample this difference increases to an average of 3.27 in Waterloo and 2.16 in Calgary. Similarly, 66% of respondents in Waterloo reported turning to their friends for business advice compared with 46% in Calgary. This suggests that networking, particularly with other entrepreneurs, is seen as an important part of the entrepreneurship process. The most popular view of networking in the region, as expressed by one entrepreneur is that: "...here, unlike any other community that I've lived or worked [in], there's a strong sense of not just a desire, but a responsibility, to help up and coming

companies, especially technology companies.” (W114) This entrepreneur went on to observe that: “...we do a good job of integrating people into the community and that builds strong ties....I’d hazard a guess that we have more individuals in this community that have very broad, expansive networks than other communities.” Local economic development officials had a similar view of regional networking, with one stating: “what you’ll find is that this community is very well networked. There are networking functions daily. I can go to any of those functions and know most of the people in that room. And we all circulate in different circles, but we’re all connected” (W107).

Unlike in Calgary, entrepreneurs in Waterloo commonly viewed networking as an opportunity to develop business skills and learn how to solve business problems. In the words of one entrepreneur: “you find that you want to stay in touch with people just to see how you’re doing compared to them. It’s competitive, so you want to compare financials. Who’s doing better this year?” (W110) Communitech’s peer-to-peer events are an important platform for this kind of networking. Younger entrepreneurs often discussed these groups as a key tool in learning about the challenges of management, as one such entrepreneur described: “when I say you can get anything that you want from Communitech, the truth is you can get anything you need from the community. Communitech is the hub where you can access that. Peer to peers, you get to go and learn about problems other CEOs are having and how they’re solving them” (W117). Networking with other entrepreneurs becomes an important part of identifying creation amongst this group.

However, these views on networking were not universal within the community. Entrepreneurs who do not fit the region’s vision of an ideal technology entrepreneur, due to their age, gender, or goals for the company, found it difficult to utilize the networking events organized by Communitech and other groups. For instance, the founder of a biotech firm noted that for him: “[Communitech is] not as valuable as it is for most companies in Kitchener-Waterloo. They have, at least until recently, been focused on the type of companies that usually grow up here, which are in [the] software area....they don’t really have much that can help us.” Similarly, another entrepreneur in the medical device market felt uncomfortable working with Communitech to find an advisor because he did not have a university education and instead turned to social contacts he made through his church for help. This exclusion is both direct, due to him not being welcomed in the networks since he will be seen as a ‘illegitimate’ entrepreneur, as well as indirect as a result of his individual habitus. Many entrepreneurs who do not identify as growth-oriented technology entrepreneurs placed little value on the symbolic capital produced by participating in Waterloo’s entrepreneurial networks. Spending valuable time attending networking events or meeting with other entrepreneurs therefore makes little sense compared to spending that time building the business or with family and friends.

## **6. Discussion and Conclusion**

Calgary and Waterloo have very different local entrepreneurial fields with different relationships to the FTE. This has contributed to differences in networking practices found in the two communities. Calgary’s local field has developed in tandem with the oil and gas industry rather than the FTE. This American-influenced industrial culture has contributed to the importance of entrepreneurship as a source of economic capital rather than symbolic capital. Calgary’s local field positions entrepreneurship as a way to generate wealth rather than as a process of personal and technological development. As such, networking for its own sake has little value. The intensive networking found within the region’s oil and gas cluster is aimed at finding new clients rather than helping participants build their entrepreneurial

identity or skills. Calgary's field reduces the symbolic capital of this type of networking, lowering its importance relative to other entrepreneurial activities. This led to the normalization of particular types of networking practices, such as intensive networking with potential clients in the oil and gas industry while delegitimizing other practices such as attending networking events hosted by economic development organizations. Developing strong ties with other entrepreneurs is less important in Calgary because it does not contribute to the goals that are prioritized within the local field: creating a venture that can generate substantial windfall profits.

Waterloo's local field has been heavily influenced by the FTE through both the accidental cultural spillovers from the University of Waterloo as well as the active role of economic development agencies like Communitech. This had led to the normalization of a particular form of entrepreneurship within the local field: the innovative, growth-oriented technology firm. The symbolic capital of producing a new venture based on a 'cool' technology is highly prized in the field and is often judged as being more important than economic capital, at least in the short term. Entrepreneurs' networking practices tended to be organized around these norms. They reported spending more time networking and talking with other entrepreneurs in order to improve their business skills and learn from one another. They were much more willing to attend networking and peer groups organized through Communitech as well as engage in informal conversations with one another. The social capital this produced helps increase the symbolic capital of their entrepreneurial endeavours and increases their social status within the community.

Networking is a social activity. Though networking between entrepreneurs, advisors, clients, and customers is a crucial part of the entrepreneurship process, it is not a disembodied economic activity. The choice to network, with whom, and how much energy to dedicate to that activity as opposed to others, is deeply bound up in how individual actors understand the purpose of entrepreneurship and their relationships to a variety of contextual factors. These choices are made within the context of two major 'fields:' the local field and the larger field of technology entrepreneurship. The FTE spreads a global message of intensive networking as a natural part of the entrepreneurship process. Networking is a key way to establish a new venture's legitimacy and more importantly, of developing an entrepreneurial identity. However, the FTE is interpreted through the social rules and outlooks of the local field that have developed out of a region's economic and social history. This contributes to the growth of distinctive patterns of entrepreneurial networking within different regions.

However, to simply attribute the development of these regional patterns on the local field does a disservice to the ability of entrepreneurs to strategically experiment with new practices to achieve their economic and social goals. From a Bourdieuan perspective, networking is a social practice developed within the context of the fields an entrepreneur operates in. Networking is not necessarily done purposefully to increase profits or help create legitimacy, but rather because particular networking practices make sense given the entrepreneur's habitus-based understanding of the field of technology entrepreneurship and their own local field. While seemingly an obvious point, this has several implications for the way researchers understand entrepreneurial networking. Understanding networking practices are often more important than understanding the size or density of entrepreneurs' networks. Entrepreneurs' goals when networking and their underlying belief about its importance will inform both how they form networks and the types of knowledge and resources they can draw from the networks they build. Entrepreneurial networking is therefore a heterogeneous activity that develops within unique regional, industrial, and cultural contexts. Attempts to

stimulate entrepreneurial networking in a region therefore have to take into account how networking is perceived within the local field and work within those constraints rather than trying to introduce a ‘Silicon Valley’-style perspective of entrepreneurial networking.

### Endnotes

- 1) The sectors were: computer and peripheral equipment manufacturing (NAICS 33411), software publishers (51121), data processing, hosting and related services (51821), computer systems design and related services (54141), scientific and technical consulting services (54169), and engineering services (54133).

Table 1: Demographic and Economic Data for Calgary and Waterloo  
2)

	Calgary	Kitchener-Waterloo	Canada
Population	1,096,833	477,160	33,476,688
Self-Employment Rate (%)	11%	9%	11%
High-Tech firm formation per 100,000 residents (2001-2006)	12.8	7.5	6.1
Labour force in natural and applied science occupations (%)	11.9%	8.9%	7.2%
Population with bachelor's degree or higher (%)	28.8%	21.6%	20.9%
Bachelors degrees or higher in STEM fields (%)	15.1%	11.6%	9.8%
GDP per capita (2007 dollars)	\$73,151	\$50,161	\$45,704
Average size of VC investment, 2000-2011 (2007 dollars)	\$2,866,391	\$1,979,297	\$239,583
VC investments per 100,000 residents (2000-2011)	17.9	19.5	17.9

Source: Statistics Canada (2011); Conference Board of Canada (2012); Thomson Reuters (Thomson Reuters, 2013)

Table 2: Type and Location of Interviews

	Calgary	Waterloo	Total
<b>Entrepreneurs</b>	28	23	51
<b>Investors</b>	5	5	10
<b>Economic Development Officials</b>	6	4	10
<b>Total</b>	39	32	71

- Aldrich, H., & Zimmer, C. (1986). Entrepreneurship through social networks Population Perspectives on Organization (pp. 13-28). Upsala: Acta Universitatis Upsaliensis.
- Anderson, A. R., & Jack, S. L. (2002). The Articulation of Social Capital in Entrepreneurial Networks: A Glue or Lubricant? *Entrepreneurship and Regional Development*, 14, 193-210. doi: 10.1080/08985620110112079
- Anderson, A. R., & Miller, C. J. (2003). "Class matters": human and social capital in the entrepreneurial process. *The Journal of Socio-Economics*, 32, 17-36. doi: 10.1016/S1053-5357(03)00009-X
- Arenius, P., & de Clercq, D. (2005). A Network-Based Approach on Opportunity Recognition. *Small Business Economics*, 24, 249-265.
- Bourdieu, P. (1977). Outline of a theory of practice. Cambridge: Cambridge University Press.
- Bourdieu, P. (1986). The Forms of Capital. In J. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). New York: Greenwood.
- Bourdieu, P. (1990). *The Logic of Practice*. Stanford: Stanford University Press.
- Bourdieu, P. (2005). *The social structures of the economy*. Cambridge, UK: Polity.
- Bourdieu, P., & Wacquant, L. J. D. (1992). *An Invitation to Reflexive Sociology*. Chicago: University of Chicago Press.
- Bramwell, A., Nelles, J., & Wolfe, D. A. (2008). Knowledge, Innovation and Institutions: Global and Local Dimensions of the ICT Cluster in Waterloo, Canada. *Regional Studies*, 42, 101-116. doi: 10.1080/00343400701543231
- Brüderl, J., & Preisendörfer, P. (1998). Network Support and the Success of Newly Founded Businesses. *Small Business Economics*, 10, 213-225.
- Burt, R. S. (2004). Structural Holes and Good Ideas. *American Journal of Sociology*, 110, 349-399.
- Centner, R. (2008). Places of Privileged Consumption Practices: Spatial Capital, the Dot-Com Habitus, and San Francisco's Internet Boom. *City & Community*, 7, 193-223. doi: 10.1111/j.1540-6040.2008.00258.x
- Chastko, P. (2004). *Developing Alberta's Oil Sands: From Karl Clark to Kyoto*. Calgary: University of Calgary Press.
- Conference Board of Canada. (2012). *Metropolitan Forecast: GDP at Basic Prices by Industry*. Toronto, ON.
- de Clercq, D., & Voronov, M. (2009a). The Role of Cultural and Symbolic Capital in Entrepreneurs' Ability to Meet Expectations About Conformity and Innovation. *Journal of Small Business Management*, 47, 398-420. doi: 10.1111/j.1540-627X.2009.00276.x
- de Clercq, D., & Voronov, M. (2009b). The Role of Domination in Newcomers' Legitimation as Entrepreneurs. *Organization*, 16, 799-827.
- de Clercq, D., & Voronov, M. (2009c). Towards a Practice Perspective of Entrepreneurship: Entrepreneurial Legitimacy as Habitus. *International Small Business Journal*, 27, 395-419.
- Dodd, S. D., & Anderson, A. R. (2007). Mumpsimus and the Mything of the Individualistic Entrepreneur. *International Small Business Journal*, 25, 341-360. doi: 10.1177/0266242607078561
- Fligstein, N., & McAdam, D. (2012). *A theory of fields*. New York: Oxford University Press.
- Foster, P. (1979). *The Blue-Eyed Sheiks: The Canadian Oil Establishment*. Toronto: Collins.
- Gill, R., & Larson, G. S. (2014). Making the ideal (local) entrepreneur: Place and the regional development of high-tech entrepreneurial identity. *Human Relations*, 67, 519-542. doi: 10.1177/0018726713496829

- Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78, 1360-1381.
- Henry, N., & Pinch, S. (2001). Neo-Marshallian nodes, institutional thickness, and Britain's 'Motor Sport Valley': thick of thin? *Environment and Planning A*, 33, 1169-1183.
- Hoang, H., & Antoncic, B. (2003). Network-Based Research in Entrepreneurship: A Critical Review. *Journal of Business Venturing*, 18, 165-187.
- House, J. D. (1980). *The last of the free enterprisers: The oilmen of Calgary*. Toronto: MacMillan of Canada.
- Jack, S. L. (2005). The Role, Use and Activation of Strong and Weak Network Ties: A Qualitative Analysis. *Journal of Management Studies*, 42, 1233-1259.
- James, A. (2005). Demystifying the Role of Culture in Innovative Regional Economies. *Regional Studies*, 39, 1197-1216.
- Karataş-Özkan, M. (2011). Understanding relational qualities of entrepreneurial learning: Towards a multi-layered approach. *Entrepreneurship and Regional Development*, 23, 877-906. doi: 10.1080/08985626.2011.577817
- Klyver, K., & Foley, D. (2012). Networking and culture in entrepreneurship. *Entrepreneurship & Regional Development*, 24, 561-588. doi: 10.1080/08985626.2012.710257
- Klyver, K., Hindle, K., & Meyer, D. (2008). Influence of social network structure on entrepreneurship participation—A study of 20 national cultures. *International Entrepreneurship and Management Journal*, 4, 331-347. doi: 10.1007/s11365-007-0053-0
- Lang, R., Fink, M., & Kibler, E. (2014). Understanding place-based entrepreneurship in rural Central Europe: A comparative institutional analysis. *International Small Business Journal*, 32, 204-227. doi: 10.1177/0266242613488614
- Lechner, C., & Dowling, M. (2003). Firm Networks: External Relationships as Sources for the Growth and Competitiveness of Entrepreneurial Firms. *Entrepreneurship and Regional Development*, 15, 1-26.
- Lucas, M., Sands, A., & Wolfe, D. A. (2009). Regional Clusters in a Global Industry: ICT Clusters in Canada. *European Planning Studies*, 17, 189-209.
- Neff, G., Wissinger, E., & Zukin, S. (2005). Entrepreneurial Labor among Cultural Producers: "Cool" Jobs in "Hot" Industries. *Social Semiotics*, 15, 307-334. doi: 10.1080/10350330500310111
- Nelles, J., Bramwell, A., & Wolfe, D. A. (2005). History, Culture and Path Dependency: Origins of the Waterloo ICT Cluster. In D. A. Wolfe & M. Lucas (Eds.), *Global Networks and Local Linkages: The Paradox of Development in an Open Economy* (pp. 227-252). Montreal and Kingston: McGill-Queen's University Press.
- Powell, W., White, D. R., Koput, K. W., & Owen-Smith, J. (2005). Network Dynamics and Field Evolution: The Growth of Interorganizational Collaboration in the Life Sciences. *American Journal of Sociology*, 110, 1132-1205.
- Rutten, R., Westlund, H., & Boekema, F. (2010). The spatial dimension of social capital. *European Planning Studies*, 18, 863-871. doi: 10.1080/09654311003701381
- Saxenian, A. (1994). *Regional advantage: culture and competition in Silicon Valley and Route 128*. Cambridge, Mass: Harvard University Press.
- Shane, S., & Cable, D. (2002). Network Ties, Reputation, and the Financing of New Ventures. *Management Science*, 48, 364-381.
- Sorenson, O., & Stuart, T. (2001). Syndication Networks and the Spatial Distribution of Venture Capital Investments. *The American Journal of Sociology*, 106, 1546-1588.
- Spigel, B. (2013). Bourdieuan approaches to the geography of entrepreneurial cultures. *Entrepreneurship & Regional Development*, 25, 804-818. doi: 10.1080/08985626.2013.862974
- Spigel, B. (2015). The Relational Organization of Entrepreneurial Ecosystems. *Entrepreneurship Theory and Practice*.
- Stringfellow, L., Shaw, E., & Maclean, M. (2014). Apostasy versus legitimacy: Relational dynamics and routes to resource acquisition in entrepreneurial ventures. *International Small Business Journal*, 32, 571-592. doi: 10.1177/0266242612471693
- Stuart, T., & Sorenson, O. (2003). The Geography of Opportunity: Spatial Heterogeneity in Founding Rates and the Performance of Biotechnology Firms. *Research Policy*, 32, 229-253.

- Swartz, D. (1997). *Culture and power: the sociology of Pierre Bourdieu*. Chicago: University of Chicago Press.
- Uzzi, B. (1996). The Sources and Consequences of Embeddedness for the Economic Performance of Organizations: The Network Effect. *American Sociological Review*, 61, 674-698.